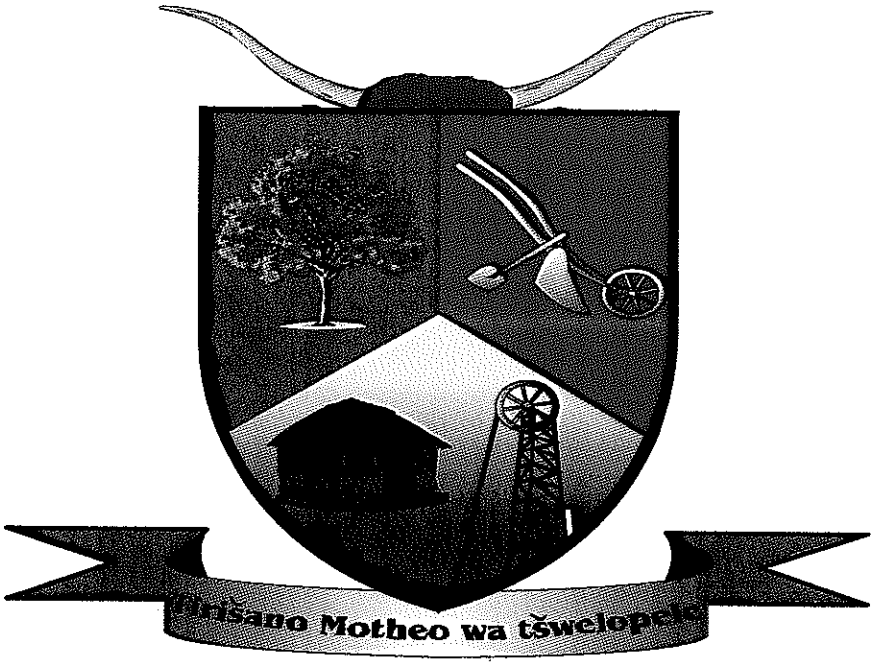
Fetakgomo Local Municipality



Council Resolution No: C72/2014

Information Technology Strategy Plan

Table of Contents

1. Executive Summary 5
1.1. Current state of Information Systems 5
1.2. Information Management 5
1.3. ICT Management 6
1.4. Strategic Management 6
1.5. Strategic Business Architecture 6
1.6. Environmental Challenges 6
1.7. Municipal Challenges 7
1.8. Improvement Opportunities 7
1.9. Expected Benefits 8
1.10. IT Strategy Plan Initiatives 8
1.10.1. Strategic Management 8
1.10.2. E-Governance 8
1.10.3. E-Government Services 9
1.10.4. Platform Services 10
1.10.5. ICT Infrastructure Services 10
1.10.6. Conclusion 11
2. Context and approach 11
2.1. Information Technology Strategic Planning 12
2.1.1. Purpose of IT STRATEGY 12
2.1.2. Expectations 13
2.1.3. Objectives 13
2.1.4. Output 14
2.1.5. Beneficiaries 14
2.1.6. Key Stakeholders 14
2.1.7. Strategic Business Architecture 14
2.1.8. Objectives of local government 14
2.1.9. Developmental duties of municipalities 14
2.1.10. Municipalities in co-operative government 15
2.1.11. Mandate 15
2.1.12. Responsibilities 15
2.2. Vision for Fetakgomo Local Municipality 16
2.2.1. Mission: 16
2.2.2. Objectives 16
2.2.3. Values: 17
Fetakgomo Local Municipality believes in 17
2.3. Municipal Context 17
2.3.1. Services 17
2.4. Strategic Imperatives 17
2.4.1. Community 18
2.4.2. Management 18
2.4.3. Political 18
2.4.4. Activities 19
2.5. Funding 19
2.6. Structures 20
2.6.1. Fetakgomo Local Municipal Organisational structure 20
2.7. Information Management 20
2.7.1. Council 20
2.7.2. Office of the Municipal Manager 21

2.7.3. Corporate Services 22
2.7.3.1. Financial Reporting needs 23
2.7.4. Technical Services 24
2.7.5. Community Services 24
2.7.6. Integration of Information 26
2.7.7. Office productivity tools 27
2.8. Environmental Challenges 27
2.9. Municipal Challenges 27
3. External Analysis 28
3.1. National & Provincial, District standards & initiatives 28
3.2. Integrated Development Plan (IDP) 29
3.2.1. Batho Pele Principles 29
3.3. Technology Trends 29
4. ICT Architectures 31
4.1. Information and Communication Technologies (ICT) 31
4.2. Current state of ICT's in Fetakgomo Local Municipality 32
4.2.1. Server room 32
4.2.2. External connectivity 32
4.2.3. Support 32
4.2.4. Operating Systems 32
4.3. Information Systems 32
4.3.1. SAGE AccPac and Payroll ERP 33
4.4. ICT Management 33
4.4.1. Environment 33
4.4.2. Policies and Procedures 33
4.5. Future Architectures 34
4.5.1. E - Information Architecture 35
4.5.2. Communication Architecture 36
4.5.3. Technology Architecture 36
4.5.4. E-Government Architecture 36
4.5.5. Organisational Architecture 37
4.5.6. Business Continuity and Security Architecture 37
5. IT Strategy Plan 37
5.1. Public Services 38
5.1.1. Strategic Management 38
5.1.2. E-Governance 38
ICT Management 38
ICT Planning and prioritisation 39
ICT Procurement 40
5.1.3. E-Government Services 40
Improved Financial Management 40
Implement IDP System 40
Effective Communication 41
Contact CentRE 41
Tourism Development 41
Library services 41
5.2. Platform Services 42
5.2.1. Application Platform (Software) 42
5.2.2. Service Platform 42
5.2.3. Desktop Platform 43
5.2.4. Operating Systems 43
5.3. Infrastructure Services 43
5.3.1. Technology Infrastructure 43
5.4. IT Strategy Plan Initiatives 44
5.4.1. Public Services 44

5.4.2. Platform Services 45
5.4.3. Infrastructure Services 45
5.5. Prioritisation 46
5.6. Implementation Plan 46
5.7. Benefits 48
Definitions, Acronyms and Abbreviations 48

Unofficial Document

1. Executive Summary

Municipalities are under increasing pressure to show visible improvements in service delivery.

These pressures create additional strain on the system of local government. In order to function effectively under these strains, accurate and effective communication, and information is required between the system and its constituents.

The traditional focus of municipalities on technology and financial information is no longer sufficient to manage the ever-increasing relationships, management information, reporting, legislative, and communication requirements.

The lack of timely, accurate information leads to sub-optimal decision-making and a possible slide into a 'fool's paradise', and ultimate anarchy.

In the Analogy of the Grotto, Brain talks about the future belong to the takers, not the security seekers. The more you seek security, the less of it you will have and the more you pursue opportunity, the more security you will achieve. People don't want to face the truth or the light, unless the market imposes that task on them, unless they virtually have no choice but to seek feedback and do something about it regularly.

1.1. Current state of Information Systems

In order to provide for the required information, Municipality has implemented a number of paper-based and electronic information systems.

The most successful of these information systems is the implementation of the Financial System, which is capable of providing financial department of the Fetakgomo with access to make electronically all financial requirement needs of the Municipality.

The municipality has also succeeded in maintaining a stable financial system (SAGE ERP ACCPAC) that is capable of meeting their required financial, legislative and reporting needs.

1.2. Information Management

Despite these successes, the system breaks down in a number of places. Key areas are in feedback to the public on service delivery, flow of information between council and officials, and flow of information to staff not provided with access to computers.

Furthermore, reports requested by other agencies (national, provincial) are sometimes being delayed, or provided on time.

"Once you get information, you tend to use it. When you get enough people with information, you raise the consciousness and unleash energies. The higher the

consciousness, the more the social, national and political will develop."

1.3. ICT Management

There is commitment from municipality to ensure that ICT management becomes one of its priorities, with the insufficient fund allocated to ICT in the municipal's IDP process, which leads to poor/limited management of ICT assets such as hardware, software etc.

1.4. Strategic Management

Key to the effective functioning of the municipality is an alignment between the strategic imperatives, and the operational objectives. This link appears to be missing, resulting in a perception of poor service delivery/and or capabilities.

Furthermore, departments appear to operate in vertical silo's, with limited interaction between them. This severely affects the municipalities' ability to respond efficiently to service requests.

It was further found that the Integrated Development Plan (IDP) is minimally integrated in the municipality's operations for planning, budgeting, measurement and implementation purposes.

Furthermore, diverse services are required by the public in all wards, but only some Financial (Payment) and Engineering service are provided.

1.5. Strategic Business Architecture

The Constitution establishes local government as a distinctive sphere of government, interdependent and interrelated with national and provincial spheres of government.

There is fundamental agreement in the country on a vision of democratic and developmental local government in which municipalities fulfill their constitutional obligations.

These are determined to ensure sustainable, effective and efficient municipal services; promote social and economic development; encourage a safe and healthy environment and working with communities in creating environments and human settlements in which all our people can lead uplifted and dignified lives.

This assessment identifies the objectives of Fetakgomo Local Municipality according to the constitution; the vision, mission, purpose, and values for Fetakgomo municipality, and highlights the municipal context, strategic imperatives, funding, and structures.

1.6. Environmental Challenges

In implementing this vision, the INFORMATION TECHNOLOGY STRATEGY PLAN current state assessment has determined a number of environmental challenges that may hinder the achievement of these ideals.

As highlighted before, there is increasing pressure on service delivery that is exacerbated

by a lack of resources (Computers) to perform as before. Delivery is further throttled by having to comply with increasing regulation, and limited use of own initiative.
In the municipality, there is a perception of limited competency. This results in a lack of trust, poor decision making ability, lack of responsibility, and the emergence of a blame culture. It is also evident that authority is not delegated with responsibilities.
Lastly, some staff exhibits a general lack of motivation or purpose (why), and appears to feel helpless to influence system, threatened by BBEE requirements, and/or are biding time for retirement/end of their contract.

1.7. Municipal Challenges

In addition to the previous challenges, there appears to be no clear strategy on service delivery. With increasing demands from communities, and decreasing ability to deliver services, the municipality will require the ability to match resources to service needs, and say 'no' to services that cannot be delivered.
This situation is further worsened by poor communication with the citizen, between council and municipality, between business units, and in business units.
The system also appears to be inflexible, and does not adapt well to change. Strict compliance with rules and regulations lead to limited innovation and initiative. There also appears a strong influence of the trade unions on employees.
and that ICT is under-funded (less than 10% of the total budged).

1.8. Improvement Opportunities

A preliminary assessment has identified the following improvement opportunities.
ICT management requires dedicated attention. It is however feasible for the municipality to create a dedicated post for ICT management. It is therefore not practice that unit managers take responsibility for their own ICT management needs, and that an ICT steering committee should be operative to coordinate such activities, and represent the ICT requirements at the executive mayoral committee.
It is also vital that the municipality clarify focus areas (strategy) of municipality, and the roles/relationship between the council and the municipality.
Furthermore, to enhance whole system collaboration, it is recommended that Fetakgomo:

1) Hold regular formal/informal meetings between council and officials, and amongst departments, and with outlying offices
2) Make council and management minutes available to all staff (electronically & on paper)
3) To improve interaction with communities, it is recommended that Fetakgomo:
4) Implement an integrated service counter (e-Government services)
5) Use Munsoft system effectively as a basis for integrated service delivery platform.

6) Implement a call Centre integrated with Munsoft system for emergency services and service requests/complaints

It is also prudent for the municipality to align itself with the LG-Net initiative, as it can be beneficial to aid the municipality in service delivery information.

It should also be noted that funding for the IT STRATEGY PLAN initiatives identified in this document should come from capital expenditure (CAPEX) or special project funding.

1.9. Expected Benefits

By implementing the IT Strategy Plan, Fetakgomo Local municipality should benefit through improved communication, aligning their ICT with the municipality' strategies, and by putting people first.

1.10. IT Strategy Plan Initiatives

As part of the IT Strategy Plan, and the future state development, a number of ICT initiatives have been identified jointly with the municipality. These initiatives, together with the management initiatives, shall be prioritized by the ICT steering committee, and further funding/budgets sought or allocated. Following is a listing of the key IT Strategy Plan initiatives:

1.10.1. Strategic Management

Strategic management defines how the municipality manages its key resources in enabling service delivery:

1) ***Decide on role of outlying offices*** – The Thusong Service Centre in Mohlaletse, Atok and the Staykraal, Pelangwe, Sekodibeng and Mphanama community halls as well as Fetakgomo library should be considered to be converted into a full service point by deploying a full ICT infrastructure to them.
2) ***Clarify key development and service delivery priorities*** – based on the IDP process, "It is essential to spend the limited council (municipal) resources on the key development priorities of the local community".

1.10.2. E-Governance

E-Governance defines how the municipality does ICT planning and management in the municipality. The following section outlines these ICT management and planning initiatives identified as part of the e-governance recommendations.

1) ***ICT Steering committee*** – ICT management require dedicated attention in the municipality. Lack of budget and dedicated staff indicate a joint responsibility amongst senior managers and system owners. The Municipal Manager shall

represent the ICT Steering committee at EMC. The manager IT & Archives will act as the secretariat, coordinating meetings, minutes, and contact person for all initiatives.

2) ***Prioritize IT STRATEGY PLAN initiatives*** - The ICT Steering committee needs to prioritize these IT STRATEGY PLAN initiatives, based on available funding and capability to source funding and vendors. These initiatives can be prioritized according to the scoring framework provided.

3) ***Develop a transparent ICT procurement process*** – To prevent ICT's from being implemented without due consideration for the organisational and functional needs, a transparent process should be implemented based on detailed system requirements.

4) ***IT STRATEGY PLAN Initiatives funding to come from CAPEX or special project funding*** – Funding for IT STRATEGY PLAN initiatives, are over-and-above the capital required for the normal operation of the municipality. Funding should be provided by budgeting for capital expenditure items, and by applying for donor grants.

1.10.3. E-Government Services

E-Government services are effectively normal services provided through e-channels such as internet/email, telephones, and computers. Following are the key e-Government services that Fetakgomo Local Municipality should implement as part of their INFORMATION TECHNOLOGY STRATEGY PLAN.

1) ***Train all managers in budgeting and financial basics*** – in order to improve the adoption of the financial system in the municipality, all managers should do their departments' budget, and financial analysis on SAGE ERP module that deals with budgeting. This may require additional training.

2) ***Implement IDP Information Management System*** - The municipality is required to establish and manage an internal IDP system. The system should be capable of planning, prioritising, and tracking progress on IDP initiatives. This should be linked to budgeting and project management systems in order to evaluate progress and performance management.

3) ***Implement and Roll out Document Management System (DMS) to everyone in the municipality*** – Information from DMS should be made available in paper format, or by providing shared PC's for

staff that do not have their own. Minutes, Bylaws, and public notices should be reproduced free of charge from DMS, and made available to the public.

4) ***Deploy services to remote areas by using ICT's*** –in order to provide the staff at these offices with the tools to answer all types of queries, not just financial ones etc.
5) Implement a central Information contact centre - Implement a central contact centre integrated with DMS for emergency services and service requests/complaints. This should allow for all public calls, information, service request, enquiries, emergencies etc. to be logged and handled. This does not mean that calls are just logged and forwarded. Agents should be able to answer all reasonable municipal queries as a first line contact centre. More complicated requests should be forwarded to the relevant people. All requests should be logged, and allocated in DMS.

1.10.4. Platform Services

The following section defines the platform services on which the provisioning of e-government services is dependent.

1) ***Application Platform (Software)*** - Ensure continued support for SAGE ERP AccPac(VIP Payroll),Pastel and Munsoft System
2) ***Implement Citrix terminal server for resource intensive applications*** – all resource intensive applications for remote stations, DMS & internet should be deployed via Citrix. Develop and implement desktop & Server standards - The servers are Windows Server 2008 R2. This ensures easier support and updates. Servers should be upgraded to the latest OS.

1.10.5. ICT Infrastructure Services

The following ICT improvement opportunities have been identified:

1) ***Consolidate Servers*** – Once the servers have been upgraded, all applications should be consolidated, and the number of servers reduced. Vendor applications can all be run off the same servers. The municipalities' IT service provider should be able to remotely manage and configure these servers.
2) ***Upgrade Server Room Infrastructure*** - The computer room should ideally adhere to best-practice standards and have amongst others access control, temperature control, raised flooring, static protection etc.

3) ***Implement ADSL for Internet Access*** - The current bandwidth for external connectivity is extremely slow and should be upgraded to accommodate email and Internet connectivity and also prepaid updates. An uncapped ADSL solution should be investigated or both of the above proposed solutions.

1.10.6. Conclusion

In order to address the strategic importance of ICT in the Fetakgomo Local municipality, and change the system to accommodate these new needs, individuals in the organisation will be required to change their paradigms.

Although this is not the purpose of an IT STRATEGY PLAN, it is hoped that the techniques and frameworks established during the development of the IT STRATEGY PLAN will aid the municipality in providing a platform for such change.

2. Context and approach

The modern and different needs of municipalities require new and more innovative responses from information systems, information technology as well as information management system. Therefore, when municipality begins to deliver these systems that will enable more effective functioning, it characterizes the well-being of municipality in the information age. This however, places greater emphasis on municipality to accommodate the rapid technological surge. Corollary, we find information technology as a major catalyst for creating change. We witness every day, the emergence of new challenges and advantages that it brings to the business environment, both in public and private sectors.

The focus of ICT in municipalities has traditional been on technology and infrastructure. Software is purchased to automate manual processes. The most important automation has been financial accounting, driven by a need for more detailed data on budgeting and expenditures.

"Financial accounting only tells you about things that are measurable...it does not deal with people problems and challenges. Using financial accounting to deal with people problems is like playing rugby with a volley ball: the tool is not suited to the sport." It focuses almost exclusively on acute problems and surface effects: revenues, costs, etc. This can be likened to keeping score in a soccer game. The score shows who won or lost, but not how the game was played or the rules of the game.

This raises a challenge for the municipality in trying to understand the demands of service delivery in the context of a government system, the flows or blockages of information, and collaborating and participating with various stakeholders.

"A (municipality) is an ecological system (made up of people working in a community), and the information systems should deal with the whole environment to help executives understand what's going on." This requires of all councilors and officials to build environment where information systems and information technology is not only aligned to the broader processes of service delivery, but to deal more effectively with people (employees citizens, funders, other governing bodies). "Until an executive understands what's going on, his judgments and decisions will be flawed, distorted, incomplete or inaccurate. People believe that they want to believe, and what is strongly desired is easily believed". To achieve this requires commitment and synergy in effort.

2.1. Information Technology Strategic Planning

In order to understand the human, information, and functional needs of the municipality, an approach called Information Technology Strategy planning is used. The overall project objective of the IT STRATEGIC PLAN is to provide an appropriate and stable platform to:

1) Strengthen, effectively manage and implement the Municipality's IDP process.
2) Assist with the co-ordination and future planning of the functions, particularly service delivery, of the Municipality.
3) Improve revenue collection.
4) Improve the effective management of the municipality's assets.
5) Improved utilization of the Municipality's human resources.
6) Facilitate accurate and timeous statistical and performance management reporting for all levels within the municipality and also reporting required for customers and external stakeholders (e.g. National and Provincial government).
7) Facilitate improved access to electronic based data resources and communication systems such as the LG-Net.
8) More importantly to reduce the costs of delivering of delivering and managing services delivery using technology.

2.1.1. Purpose of IT STRATEGY

The IT STRATEGY is required to provide a long-term vision for information systems and information technology in Fetakgomo Local Municipality that is based on the Municipalities strategies and vision, human and information needs, and regulatory compliance. The IT STRATEGY presents a framework and methodology to provide management with the facilities to help them achieve their overall strategic objectives, plan, review, and control information systems projects. The IT STRATEGY also

contains specific elements to give guidance on what is required and how it will be done, the use of explicit tools to support and automate the process, and how to manage and sustain the quality of the results.

The purpose of the IT Strategic Plan is therefore to:

1) Ensure that information systems strategic planning is consistent, aligned and fully integrated within the broader strategic business planning processes of the Municipality, the District, and the Province and as a whole at the three levels of business (strategic, tactical and operational).
2) Introduce and implement the concept of an integrated public counter (e-Government services) in Fetakgomo and the implementation of e-Governance

2.1.2. Expectations

The following expectations and needs were identified:
The IT STRATEGIC Plan must;

1) Provide a Comprehensive, Prioritized Plan for Information Systems, incorporating systems support
2) Support achievement of strategic objectives thereby ensuring alignment and coordination with information systems
   I. Integrated Information Systems
   II. Achieve circuit goals
   III. Ensure correct delivery structures
   IV. Access to Timely Information
   V. Be User Friendly, Accessible, Accurate, Holistic, and Flexible.

2.1.3. Objectives

An enterprise overview of the municipality's business processes, and how the municipality's Information Technology (IT) environment interfaces with the business processes to contribute towards the following.

1) Implementation of the Council's IDP process.
2) Improvement in the quality and cost effectiveness of service delivery
3) Improved revenue collection.
4) Improved management of the municipality's assets.
5) Improved utilization of the Municipality's human resources.
6) Facilitate the process of delivering effective and efficient service.

2.1.4. Output

A fully functional IT Strategy Plan developed that assist the municipality in delivering service in a more effective and efficient manner.

2.1.5. Beneficiaries

The direct beneficiaries of the projects identified in the IT STRATEGY PLAN will be the municipality and its employees/departments, who will be capacitated to manage the municipal systems. The community will benefit indirectly as they should receive more efficient and effective service delivery and improved financial and technical customer information facilities.

2.1.6. Key Stakeholders

The IT STRATEGY PLAN is based on review of acts, policies, guidelines, documents of the Fetakgomo Local Municipality and interaction with some key stakeholders.

2.1.7. Strategic Business Architecture

This phase is aimed at agreeing on a general understanding of the strategic activities of the municipality, and how it relates to information and communication technology (ICT) requirements in general. The following section will review the municipalities' key strategies, mission, purpose, values, and challenges in order to provide direction, and a foundation for the IT Strategy Plan.

2.1.8. Objectives of local government

According to the Constitution, the objectives of local government are:

1) To provide democratic and accountable government for local communities;
2) To ensure the provision of services to communities in a sustainable manner;
3) To promote social and economic development;
4) To promote a safe and healthy environment; and
5) To encourage the involvement of communities and community organisation in the matters of local government.

A municipality must strive, within its financial and administrative capacity, to achieve the objects set out in subsection.

2.1.9. Developmental duties of municipalities

A municipality must

1) Structure and manage its administration, and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community; and
2) Participate in national and provincial development programmes.

2.1.10. Municipalities in co-operative government

The national government and provincial governments, by legislative and other measures, must support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions.

Draft national or provincial legislation that affects the status, institutions, powers or functions of local government must be published for public comment before it is introduced in Parliament or a provincial legislature, in a manner that allows organized local government, municipalities and other interested persons an opportunity to make representations with regard to the draft legislation.

2.1.11. Mandate

Local municipalities are mandated to:

1) Pass by-laws - local laws and regulations about any of the functions they are responsible for. By-laws may not go against any national laws.
2) Approve budgets and development plans - every year a municipal budget must be passed that sets down how money will be raised and spent. The municipality must also approve the Integrated Development Plan (IDP).
3) Impose rates and other taxes, for example property tax.
4) Charge service fees for using municipal services like water, electricity, libraries, and so on.
5) Impose fines for people who break municipal by-laws, for example traffic fines or littering.
6) Borrow money - the council can take a loan for a development or other project and use municipal assets as surety.

2.1.12. Responsibilities

Local municipalities are responsible for the following services:

1) Electricity delivery
2) Water for household use (although in our case is provided for by the District municipality)
3) Sewerage and sanitation
4) Storm water systems
5) Refuse removal
6) Firefighting services(District)
7) Municipal health services
8) Decisions around land use (Administered by the Tribal Authority)
9) Local roads
10) Local public transport
11) Street trading
12) Abattoirs and fresh food markets
13) Parks and recreational areas
14) Libraries and other community facilities
15) Local tourism.

2.2. Vision for Fetakgomo Local Municipality

The stated vision of Fetakgomo local municipality is:

A viable municipality in sustaining rural development.

2.2.1. Mission:

The mission of the Municipality is to:

Provide integrated services in enabled environment for growth and development.

2.2.2. Objectives

The following are the stated objectives of the municipality.

The municipality's purpose is to:

1) To ensure greater investment in infrastructure and provide better services to Fetakgomo residents and businesses
2) To build the capacity of Fetakgomo Local Municipality (FTM)(by way of realising institutional efficiency, effectiveness, competency, targeted training, recruitment, inculcating an organisational culture of service responsiveness)
3) To build a sustainable revenue base for the municipality
4) To promote local economic development (LED) in the municipality
5) To improve good governance and deepen community involvement in the affairs of the municipality

2.2.3. Values:

Fetakgomo Local Municipality believes in

1) High standard professional ethics
2) Access Courtesy
3) Consultation
4) High Service Standards
5) Providing information that is accurate, relevant and up to date
6) Openness and honesty
7) Value for money
8) High Service standards

In dealing with all its stakeholders and conducting their work.

2.3. Municipal Context

The following section highlights the context of the municipality, as outlined in the Fetakgomo IDP.

2.3.1. Services

The Municipality provides the following basic services to:

1) Refuse removal,
2) Sewerage service,
3) Rates collection,
4) Tourism,
5) Traffic and parking,
6) Drainage, and
7) Road infrastructure

The Municipality also maintains and controls the following public facilities:

1) Libraries
2) Municipal parks and Recreation facilities
3) Local sport facilities

The municipality also supports the operation of the clinics and mobile services:

The municipality supports the Tourism Bureaus

They also provide a link to the Regional Services Levy Offices.

2.4. Strategic Imperatives

The following section reflects on each of the strategic imperatives in terms of their specific, and often shared operational objectives, focus Activities and defined projects

and programmes by means of which the imperatives themselves are transformed from higher level ideals and "What To Do" lists into lower level implementation focus areas comprised of on-the-ground programmes, projects and deliverables.
The municipality identified 3 focus areas in the IDP namely community, management, and political.

2.4.1. Community

A careful analysis of the needs obtained during the IDP Review phase informs the 5 strategic areas the municipality needs to focus on:

1) Community Safety & Protection;
2) Establishment of Soft Community Facilities;
3) Water & Sanitation Infrastructure Services - Upgrading of existing systems;
4) Provision of new houses and transfer of ownership;
5) Institutional transformation.

2.4.2. Management

From a management point of view, the following areas are of the highest importance:

1) Increased strategic developmental planning capacity at senior management level;
2) Developing sufficient understanding of and commitment to integrated development planning;
3) Giving effect to the Batho Pele way of interacting with the public and community;
4) Completion of strategic sector development plans with involvement of all operational managers;
5) Accessing more funding for development projects flowing from strategic plans.

2.4.3. Political

From a political perspective, Fetakgomo Local Municipality identified the following areas as being of strategic importance:

1) Housing
2) Local Economic Development for Job Creation
3) Poverty alleviation
4) Affordable Service Tariffs for the community
5) Financial Sustainability

2.4.4. Activities

The high level prioritized activities of the municipality are highlighted in the IDP as:

1) Expand our tourism potential with diligence;
2) Implement means of combating crime in Fetakgomo;
3) Put in place an economic development plan to promote the local economy;
4) Develop a spatial development framework for Fetakgomo;
5) Implement an integrated electronic information and management system;
6) Endeavour to deliver more cost effective services;
7) Establish an effective human resource management system;
8) Improve our financial position by establishing good financial and business principles;
9) Improve our standard of service delivery by combating illegal settling
   The strategic imperatives – and the associated operational objectives – should be underscored by an explicit set of measures intended as a 'litmus paper' against which all initiatives should be tested for relevance, namely

10) Focus on doing what is achievable and on completing projects ensuring that the initiatives deliver visible results.

11) Prioritization of budget expenditure to focus on infrastructure development, with increased financial allocations in the sectors of Health, Education and Welfare.
12) Re-prioritize projects that are not high impact, and expand projects that are successful.
13) Build the municipalities delivery capacity.

The spirit and framework within which the aforementioned strategic objectives are to be implemented and realized, is concisely encapsulated in the Batho Pele Principles.

2.5. Funding

The municipality achieves its objectives through applying funding from diverse sources as shown below:

The Main Sources of Income are listed according to priority from high to low:

1) Refuse Removal (currently there is no cost recovery)

2) Property rates tax
3) Grants income for example Equitable share
4) Cemetery fees (Possible gaps, no supporting register)
5) Facility rental fees for example hall bookings etc. (Possible gaps, no supporting register)

6) Traffic fines and commission on license fees (Possible risk, no internal audit from Finance side)
7) Building fees (Possible gaps, no supporting register)
8) Interest on arrear accounts
9) Trading License fees
10) Insurance claims
11) payouts
12) Tender documents

None income receipts:

1) Deposits (consumer, hall, building plans, etc.)

2.6. Structures

Local government has separated the political and administrative components of its function.

2.6.1. Fetakgomo Local Municipal Organisational structure

The municipality has structured its human resources in a hierarchical, command-driven.

2.7. Information Management

This phase is based on the operational activities from an information perspective. It addresses issues such as statutory and corporate governance and management requirements (such as GAMAP compliance, performance management compliance, human resource management, and document flow management requirements), information security requirements, information integration requirements and planning needs. This phase will build up to the development of an information management strategy and operational plan.

It examines the function, processes and information management aspects of the respective sections of the Fetakgomo Local Municipality.

2.7.1. Council

The council is comprised of the mayor, the speaker, and the executive committee that are made up of a number of councilors.

The council is politically elected, and the composition is changed after every election.

The next municipal election will takes place on the 2016.

The key objectives identified by the current council are to:

1) Ensure Service Delivery,
2) Uplift the community,
3) Improve living standards,
4) Ensure economic growth & poverty relief,
5) Implement country's laws and regulations,
6) Build unity in the community,
7) Build a proud nation,
8) Educate, and
9) Improve People's lives.

This they are required to perform in the ambit of the appropriate legislation determining their role and function, while remaining accountable to the community. To perform its function, the council needs to know 3 key pieces of information:

1. What the council's key strategies are, based on national, provincial, district and municipal objectives and constraints,
2. What the needs of the community are,
3. What resources are available to implement the strategies and service the community needs.

In local government, the political and administrative functions are separated. This means that the council is not involved in the tactical or operational aspects of service delivery. These functions are provided by the municipality, which is managed by the municipal manager. The council is required to determine (jointly with the Municipality) the allocation of scarce resources (3) to achieve the aforementioned objectives (1 & 2). In order to be able to re-direct efforts based on changing needs, the council requires further information such as:

1. Key programmes (status, progress, challenges) implemented by the municipality linked to the strategic objectives and community needs
2. Feedback from communities on the effectiveness of these programs.

Furthermore, the council is required to provide relevant information to:

1. Key strategies and decisions affecting the municipality
2. Utilization of resources and status of projects to the community
3. Other information as is required by the district, province and national governing bodies.
4. Any lack of the above information flows severely restricts the ability of the council to function effectively.

2.7.2. Office of the Municipal Manager

The office of the municipal manager is comprised of the Municipal Manager (MM), his/her personal assistant, Internal Audit Unit, and the Risk Management Officer.

The MM directs and coordinates the implementation of the service delivery objectives as determined jointly with the council. This includes the allocation of budgets, requests for external funding, corporate services such as HR, Community Services and IT, Legal Services, and he/she also sits on the council.

The IDP manager is responsible for the Integrated Development Planning (IDP) process of the municipality.

Internal Audit Office is responsible for financial compliance.

The MM holds regular meetings with top-level management who in turn hold meetings with their sections. These meetings are used to provide input and feedback from the council meetings, as well as determine service delivery objectives, projects, and status thereof.

Due to the coordinating role of the MM, the key requirement is to have an overall perspective of information that is used in the municipality. The requirement is both on a strategic and tactical level. This information is not necessarily provided by any specific system or software, but is made available as a result of the efforts of the different managers, and supporting staff. This often means that information is not immediately available, and that it has to be compiled from different reports and input.

Key requirements for the MM are to have the following information available:

1) Projects and programmes – Information on specific IDP or other projects, such as progress, completion dates, and budgets allocated/used etc.
2) HR Information - On organogram structure (posts, posts filled, frozen posts etc.), costs, leave, equity and skills development
3) Performance Management info – Information on the performance of senior management to enable constructive performance reviews.
4) Geographical Information – Information such as census data, topographical information (roads, sewerage, water, etc.), deeds, plans etc. to be reported on depending on ward or region.

2.7.3. Corporate Services

Corporate services are comprised of Human Resource, Legal Services, Community Services, Administrative Services and Information Technology.

Human Resources

The following are functions fulfilled by the Human Resource department:

1) Managing Labour relations, developing HR capacities, implementing HR systems and policies, drafting HRE policies, performing HR training, disciplinary hearings, liaising with labour unions and workforce, appointing new employees, performing HR administration, sending out HR letters, administering leave, deductions, medical aids & benefits, performing DC hearings, managing problems in the workplace, building relationships with

workforce & unions, liaison with SALGA, Local Government Services SETA, CoGHSTA and National Treasury.

The liaison with the CoGHSTA & SALGA is as follows:

1) To provide a circular re capacity & non-capacity issues, staff related issues, skills development, and workplace skills plan and employment equity.
2) SALGA – To align with national policies, agreements negotiated with the two trade unions IMATU (40%) & SAMWU (60%).

Legal Services

Legal services, and the information required would be based around the e.g. number of cases, outcome of cases, and other services provided such as outsourcing.

Administration

Administration is responsible for the office administrative functions of staff such as council meetings & administration, property administration.

Finance

1) The finance directorate is tasked with managing the financial aspects of the municipality. This includes assisting departments in budgeting, managing income, and expenditure, collecting payments, disbursing expenditures, managing the functioning of the stores, and providing financial reports as required by district, provincial, and national treasury functions.
2) In order to perform this function, they require access to all financial and treasury information generated by the municipality. Currently, this is provided by using a financial system (SAGE ERP ACCPAC) that is reconciled with the bank account. Some challenges exist with this system. Please refer to the information systems section for further details.

2.7.3.1. Financial Reporting needs

The following Financial reports are required:

Reports that need to be compiled and submitted to National Treasury Monthly, Quarterly, biannually and annually:

1) Art 71 MFMA report – monthly
2) Art 72 van MFMA report – 6 monthly
3) SDBIP report into MFMA – Quarterly
4) 12 Urgent implementation priorities – Quarterly
5) Long-Term contract (value of more than R 1 million) - Quarterly (Currently performed manually)
6) PPP – Quarterly
7) Corporate Entity- Quarterly

8) Finance management Grant – Monthly
9) Municipal Systems improvement Grant – Monthly
10) Municipal Infrastructure Grant – Monthly
11) Borrowing Returns – Quarterly
12) Budget Evaluation Checklist – Annually
13) Tender report (will become obligatory from 1 July 2014 – per case or tender)
14) Art 71 forms the basis for the Financial reports
15) The AG report, Art 72 report, SBIP, and financial chart of accounts form the basis of the annual report as required by the MFMA.
16) Also required are SA stats reports (Quarterly Finance, Yearly Capital expenditure, Quarterly Human resources and None financial –frequency unknown)

There is no facility available current for financial report resulting in the usage manual processes at the expense of service delivery.

2.7.4. Technical Services

Technical services are responsible for the technical and service infrastructure of the municipality. This includes functions such as building control and town planning as well as services such as electricity, sewerage, waste (garden, dumping, and removal) storm water management, public facilities (parks & recreation, sports centers, toilets, buildings etc).

In order to effectively provide these services, the directorate requires access to up-to-date plans on infrastructure, including the state of such infrastructure, and its location. Currently this process is managed manually, and some electronic mechanism such as a GIS would be beneficial. This should however be integrated with financial information, to reflect particulars such as property ownership, fees etc.

They are further required to manage the state of their equipment, as well as stock items needed for repair and maintenance.

2.7.5. Community Services

The community services division is responsible for Protection Services (Traffic Licensing, Law Enforcement, and Roadworthy), Housing, Community facilities (sports grounds, community centers), open areas, nature reserves, resorts, Licensing of business (formal & informal, trading & hawkers), health services, and Environmental protection. In order to effectively perform these services, the following information is required:

An updated record of living premises and housing needs:

1) A record of Living Premises Ownership and whether it is rented or private.
2) For environmental management the condition of premises
3) Construction of unauthorised structures (private, rental - rental agreement)
4) Need to know ownership of premises.
5) Information about account holders (needy, poor, etc.) for subsidies etc.
6) SAGE ERP keeps information on the account, but not of account holder – for e.g. the person's income is not known?
7) Fetakgomo can only establish income when a person applies for an account (fill in of form)
8) Requires a register of informal structures (shacks and settlements) as information regularly changes, and differ. This is necessary to aid planning for housing need and applications for houses.
9) Implementations of housing needs are done by province; however they require input from Fetakgomo for this process, as they require identifying the need.
10) Currently the waiting list is paper-based, and not available on SAGE ERP, or other systems to aid Town Planning in determining future needs. The need is also to link this with individual income to determine housing or subsidy needs, to be integrated with the LED.
11) Consolidated information from the Regional Services Levy
12) Regional Services Levy is collected that contains information on all companies in the district, which may be useful to the municipality.
13) It is important to keep records of formal and informal businesses. Currently SAGE ERP does not allow for the storage and report of such information.
14) Statistics are also required around the development of SMME's Key ICT drivers to provide for such needs, would be an update of SAGE ERP and the GIS (once implemented) to contain the required information elements. A new information system need would be a route planning/scheduling system for scheduling and delivery of services.
15) Also nice to have would be route-planning system for
16) Fetakgomo to map requests and complaints, and determine effective service delivery such as refuse removal, verge cleaning, and park maintenance etc.

In general, the directorates needs can be satisfied by a GIS based Information system to contain information about formal and informal

business in the Fetakgomo, the location of informal structures, the application of housing needs (waiting list), and the development of SMME's

2.7.6. Integration of Information

The different departments and sections of the municipality do not operate in isolation, and the sharing of information is key to efficient and effective service delivery.

Information needs

The following are the information needs of the municipality:

1) Keeping track of call centre complaints, applications, emergency calls council meetings etc.
2) Requirement for workflow & a call centre for coordination.
3) Reports on number of complaints and complaints attended to,
4) Requests presented to council, and via municipality
5) Requirement for single instance storage i.e. (Job reference number) to prevent multiple occurrences of the same request, how many requests have been attended to, how many have had an influence on council decisions etc,
6) Requirement for an escalation procedure and allocation to specific office/s, possible integration with sms'/e-mail to notify relevant people.

Required at district level

1) IDP, Budget, Projects & Programmes, Council Minutes & Decisions Planning and

Project management (Part of IDP system)

1) Questions asked are: What is status of roads, projects, programs etc? and these need to be answered & reported on
2) Updates are required from Project consolidate
3) Information is required on which budgets are spent

Strategic Planning

1) All requests are investigated. There is no strategy or link to operational planning in place.
2) Each department compiles their own strategic plans at beginning of year
3) The need to link municipal projects to strategic initiatives is required as this is not currently evident

4) Clarity is required as to which council decisions are relevant to which department/s and what is expected of these departments.
5) Informing departmental heads of council decisions. (Currently poor management of information exists)
6) Providing feedback to council on what action is being taken to deliver services

Citizen Information Needs.

7) The public requires information access in line with the values of the Municipality.
8) Roles of the library and tourism office in providing information
9) Information is received by the council, but limited information and negative messages/information is fed back to the citizens
10) Community meetings are held on a regular basis
11) Imbizo's are held where the citizens requests are tabled and identical issues are raised year on year, The only input is "matter has been tabled, submitted"
12) Council does not have access to the information for a specific community and require this in future.

2.7.7. Office productivity tools

The members of staff that have access to computers use Microsoft office, Outlook for managing documents. Files are written to a common file share. Other staffs are dependent on oral communication, printed documents, or faxes. For example, the majority of purchase orders, and stock requests are performed manually.

2.8. Environmental Challenges

The following Environmental challenges are evident:

1) A high level of service is demanded by the communities. According to the IDP, these communities represent poor economic activity, Low level of education, High Debt Cycle of Citizens, and the deployment of a number of housing projects.
2) Furthermore, the municipality is challenged with Poor communication, and the Lack of accurate and timely information.

2.9. Municipal Challenges

The following Municipal challenges are evident in the Fetakgomo Local Municipality
Perception of competency of staff as evident in the lack of trust, poor decision making ability, lack of responsibility ("buck stops here"), and the emergence of a blame culture (everyone is blaming everybody else).
The ownership and custodianship of land to address LED and housing needs.

Tracking and tracing assets of the municipality

Supply Chain

1) Lack of a Database of service providers,
2) Lack of a tool to measure and evaluate service provider performance against contract
3) Supply /Vendor /Service provider rotation
4) Project management tool
5) Usage of local suppliers/ vendors

Lack of Record management tool and facilities

Furthermore, the municipality is pressurised by increasing demands on service delivery, compounded by the lack of Resources (Staff & Money) to perform, and compliance with perceived regulation throttling activities.

Lastly, a lack of motivation or purpose (why?) is evident, resulting in limited use of own initiative.

The following communication shortcomings in the municipality have been identified:

Communication is mostly one way ("when I have spoken, it is so") and does not consider the receipt of the message, nor the understanding thereof. This has a major impact on cultural sensitivities.

People may be hiding behind the fact that information was not received or that they have not been communicated with .This could be alleviated via delivery tracking software. No follow-up of messages, instructions or requests is evident.

3. External Analysis

3.1. National & Provincial, District standards & initiatives

This section focuses on the external forces shaping the future of Information Systems (IS) in South African municipalities. The external analysis is divided into the following areas:

1) Legislation;
2) National standards;
3) Provincial standards;
4) National, provincial and municipal initiatives;
5) Technology;
6) Population;
7) Economy.

Summaries are provided on the legislation with regards to Information Systems (IS), and how the municipality is affected by the acts and policies that govern the use of IS within the municipality.

3.2. Integrated Development Plan (IDP)

The purpose of the IDP initiative is to initiate and manage the Integrated Development Plan (IDP) in the Municipality, as prescribed by the Municipal Systems Act, 2000, on behalf of the City Manager.

The IDP process refers to what the Constitution demands from the Fetakgomo Local Municipality, and details how the Municipality needs to structure and manage its administration, budgeting and planning processes to give priority to the basic needs of the community and to promote the social and economic development. The Municipality needs to become a Developmental Local Government and actively participate in national and provincial development programmes.

3.2.1. Batho Pele Principles

Batho Pele is the framework for the transformation of public service delivery, and introduces the very real concept of 'putting people first'.

Simply put, Batho Pele is the initiative to get public servants to become service-oriented, striving for excellence in service delivery, and committing to continuous service delivery improvement. It is the simple, transparent mechanism which allows customers to hold public servants accountable for the type and quality of services they deliver, informed and empowered as they should be by the eight Batho Pele principles of consultation , service standards , access , courtesy , information , openness and transparency , redress and value for money .

3.3. Technology Trends

This is a list, although not exhaustive, of some practices/technologies that could have an impact on the municipalities IT STRATEGY and are listed to provide some "food for thought" in how these technologies may change the way government operates.

The following practices are evaluated:

Server consolidation/Hosting – Infrastructure optimization and server consolidation can help government to reduce costs, increase efficiency, and achieve greater availability, scalability, and value.

Collaboration Consolidation - new collaboration technologies include features such as video and data conferencing, voice over IP (VOIP), instant messaging, streamlined routing protocols, more redundant routing in the organization, and synchronous event sinks

Hardware Standardisation - Standardizing equipment from a vendor that sells several products (from laptop to high-performance servers) allows an organisation to

deal with one supplier, negotiate bulk discounts and establish a good working relationship.

Operating System Standardisation - Most of the benefits from hardware standardisation above are applicable to software standardisation with the further benefit of rapid upgrades and rollouts and standardised training for end-users

Total cost of Ownership - The costs involved after purchase, as is the case for most life-cycle models, normally exceed initial acquisition costs several times over during the useful life of computing hardware. Proper planning for and awareness of recurring or ongoing costs after purchase can actually save an organisation significantly more money in the long run than achieving the lowest possible purchase prices on systems.

Remote desktop management - Windows 2003 provides integrated management services that reduce the costs associated with typical administrative tasks.

The following technology enablers have been identified:

Thin clients - Thin-client/server computing provides the power and ease of use of existing desktop and client/server applications, while allowing organisations to regain control of their IT systems and budgets.

Rack-mounted Servers - Technology has advanced significantly since the first floor-mounted servers. One can now get 10 servers in the same space as a traditional tower server. Consolidating, and standardising servers into single rack mounted enclosures, improves the management, scalability, and reliability.

Citrix Terminal Services - The Citrix Access Platform provides public servants with seamless, secure, on-demand access to the mission-critical applications and information required for effective response to emergencies, recovery from disasters and delivery of basic services.

Convergence - The convergence of an increasing range of communication technologies and applications is driving demand for new and innovative communications services that supports business growth, communication, technology, and the media

ADSL - ADSL (Asymmetric Digital Subscriber Line) is a broadband (very fast) modem technology that turns an ordinary telephone line into a combination of voice telephone and dedicated Internet access.

Open Source Software - OSS is typically developed through public collaboration, it is available to anyone (usually at little or no cost), it does not require proprietary license fees and it may be freely re-distributed.

4. ICT Architectures

1) This part of the IT STRATEGY PLAN will assist Fetakgomo in the development of a future ICT Architecture that comprises a conceptual enterprise architecture framework to support the municipal strategies.
2) This should enable the municipality to facilitate and enhance the effectiveness and efficiency of the utilisation of the ICT resources in subsequent planning, management and operations of ICT services.
3) The ICT Process Landscape will focus on the key ICT processes and service delivery frameworks, and will provide a baseline for categorizing current services as well as provide a framework for identifying future services.
4) The ICT Architecture Framework will identify the ICT "backbone" on which future process/technology solutions could be built in order to effectively support the municipal strategies and will focus on Architecture Guidelines, Services, Models, Standards and Strategies. These outputs will form a framework on which to base future provincial architectures.
5) The ICT Management improvements will focus on the people responsible for the ICT processes and the ICT maturity of the municipality to support these processes.
6) The improvement opportunities derived from this phase of the project should be included in the IDP and operational plans of the municipality.

4.1. Information and Communication Technologies (ICT)

Since the days of the computer processing bureau, Information Technology (IT) and Information Systems (IS), collectively known as Information and Communication Technologies (ICT), has become a mature discipline with defined processes, roles and responsibilities.

IT can be defined as "providing the 'engine' used to drive useful information systems. This includes computers, software, databases, Internet/Intranet, and telecommunications technology"7

From this it is evident that IT provides a technology foundation for IS.

Information Systems (IS) can be defined as "an organised systems of people , procedures and technologies that collects, transforms and disseminates information in an organization".8 From this definition, it is clear that one cannot ignore the people and procedures role of information systems and that it is not just about the software and/or hardware. It is often failure to successfully address these people and process issues that result in failed IS deployments.

4.2. Current state of ICT's in Fetakgomo Local Municipality

This section highlights the current state of Information and Communication Technology in the Municipality.

4.2.1. Server room

The server room infrastructure is no ideally situated and protected. Although disaster recovery or business continuity plan is in place for the protection of information. This may puts the organization at risk in the case of internal fraud.

4.2.2. External connectivity

There seems to be some confusion as to whether this connectivity actually exists. Connectivity should exist in a form of a Virtual Private Network between all the offices of the municipality including service centers. The current bandwidth for external connectivity needs to be evaluated.

4.2.3. Support

The technology infrastructure is currently supported by an external vendor that visits the occasionally. This is not ideal for immediate service delivery.

4.2.4. Operating Systems

The server operating systems are currently on Microsoft server 2008 and upgrades should be considered when needs arise. The desktop and laptops should be standardised on the same operating system possibly the latest where appropriate.

4.3. Information Systems

This section highlights the current computerized Information systems used in the Fetakgomo Local Municipality.
The standard and mostly used application systems are Sage AccPac, Payroll ERP, Munsoft System and Pastel.

4.3.1. SAGE AccPac and Payroll ERP

1) The hardware infrastructure for the software is outdated, and the backup power is insufficient to provide the server and terminals with power.
2) The municipality is also at risk should support for the system be stopped in the medium term.
3) The financial reporting is not implemented and is currently performed manually

4.4. ICT Management

4.4.1. Environment

Although the general feeling was that the Municipality Management has an open door policy, this was not the atmosphere that was obvious.
The environment was more of a prescribed environment indicative of the "old culture" whereby employees should act and perform their functions to be accepted as part of the organisation.
Initiative is not rewarded or even encouraged and hence people adhere to what they need to do for the day and leave when the clock indicated departure time.
The levels of authority were very evident whilst the review was completed, as problems or difficult questions are referred to higher levels for answers. Resolution of these queries should be delegated within the level of the activity.

4.4.2. Policies and Procedures

Based on the Technology review exercise the following outcomes are suggested:

1) IT Policy development and implementation i.e.
    I. Security Policy
    II. Disaster Recovery Plan
    III. Business Continuity
    IV. User Access
    V. Internet
    VI. Email etc.
2) Procedure development and implementation
3) IT Governance implementation i.e.
    I. COBit
    II. ITIL
4) Infrastructure architecture and implementation plan i.e.
    I. Infrastructure design and implementation
    II. Capacity requirements

III. VPN requirements

IV. Bandwidth requirements etc

5) IT outsourcing or in-sourcing policy and implementation i.e.

I. Resource requirements

6) Training requirements i.e.

I. Microsoft

II. Application training.

4.5. Future Architectures

The Enterprise Architecture Framework is the blueprint (model) that describes the overall distribution and interconnection of major architecture components - both hardware components and software components.

Enterprise Architecture can be defined as "the disciplines of assessment, visioning, design, controlled evolution and improvement with respect to business, applications, information, technology infrastructure and methods and practices". The most well known of these frameworks is the one proposed by John Zachman. In our experience with Municipalities, we have found that the simple approach succeeds and have therefore come up with the following model based on Government needs in South Africa with each layer building on the layer below it:

Operational

WAN Infrastructure (Diginet/ADSL/ATM/Radio/Laser/Satellite)

MAN Infrastructure (Routers/Fiber Optics/Cabling/Laser)

LAN Infrastructure (Hubs/Switches/Wireless/FTTD/Cabling)

Infrastructure

Services

Tactical

Platform Services

Hardware Platforms/Operating Systems

(Mainframes/Servers/Open Source)

Desktops (Thin Client/PC's/Laptops/OS)

Application and Data Platform

(Internet/Mail/SQL/ERP/BAS/PERSAL

Call Center/Web Portal/Doc Mgmt/Hosting)

© BTG 2K5

Enterprise Architecture Framework

1) E-Government Architecture - Public Services such as registrations, licensing, payments etc.
2) E-Information Architecture - Transversal information services such as citizen information (HANIS), vehicle registers (e-NATIS), tax information (NITS), MIOS etc.
3) E-Application Architecture - Applications on which services are delivered e.g. PERSAL, Document Management
4) Technology Architecture - Physical Technology such as WAN, LAN's, Hardware, Operating Systems, Telecommunications etc.
5) Business Continuity and Security Architecture - Authentication, Access Control, Policies, MISS etc.
6) Organisational Architecture - People, structure and governance

The Architecture Framework will identify the ICT "backbone" on which future process/technology solutions could be built in order to effectively support the municipalities' strategies and will focus on Architecture Guidelines, Services, Models, Standards, Strategies and Issues.

"A government-wide framework for enterprise architecture (GWEA) is a precondition for e-government. All agencies and vendors must support and work within the joint framework if this undertaking is to succeed. E-government is an investment in the future – and a strategic effort that aims at securing the durability of the welfare state" 10

4.5.1. E - Information Architecture

Useful & freely available information – Access to information, which is easy to obtain and to manipulate, enabling quick decision making.

DMS availability – Based on information being freely available, DMS should be available to all users in the Municipality.

Improved collaboration with Local Government – Improved collaboration will result in clear & definite deliverables required by Local Government including information & reports to be completed.

Improvement in SAGE ERP reporting capability – An improvement of the SAGE ERP reporting capabilities will result in enhanced quality & timeous delivery of information to Local Government, other Agencies, Municipal officials/employees and Councilors. This would in turn elevate service delivery to communities as well as general communication between all role players.

Enhanced adherence to the IDP – Ascribing to the IDP as the backbone of the Municipality enables enhances operational capability & accelerated service delivery.

Improved IDP push into communities – Consultative drive of the IDP into the communities.

4.5.2. Communication Architecture

Improved communication within the Municipality – Improved communication between the Council and Municipal officials enhances service delivery to the communities as well as improves inter departmental relationships.

Local Government and Agencies will improve information required Improved communication between the Municipality and Local Government and other Agencies – Improved communication with by these institutions.

4.5.3. Technology Architecture

Integrated systems – Integration will be one of the catalysts in eradicating the "Silo effect" as identified in the Current State findings.

SAGE ERP:

1) **Improved SAGE ERP system Development cycle** - An improvement in the development cycle for SAGE ERP would result in improved reporting & information delivery within the Municipality & to Local Government & other Agencies.
2) **Improved SAGE ERP integration with other systems** – An improvement of the SAGE ERPS integration to the other Municipality systems will alleviate the "Silo effect" by which the various departments operate i.e. SAGE ERP will not be seen as being "owned" by the Finance department.

4.5.4. E-Government Architecture

Enhanced public perception – Clear & communicated objectives and key focus areas both within the Municipality and to the communities will enhance the limited perception of the Municipality towards service delivery.

Planned and staged service delivery – Enhanced planning re service delivery would result in a consistent & sustainable service offering to the communities.

Communication of key Municipal focus areas - Clarifying & communicating the Municipalities key focus areas/initiatives would enhance the limited perception the communities have of the municipality.

Citizen focused – Implementation of a Municipal "one stop" Help desk initiative would enhance & streamline the interaction with communities.

Upliftment of living standards and subsistence of communities – An enhanced & easily implementable standard delivery plan would enable this initiative.

Upliftment Municipal officials' visibility in wards – On the ground visibility in the wards enhances communication & clear understanding of communities real needs.

4.5.5. Organisational Architecture

Enhance initiatives to improve training - Initiatives to enhance training within the Municipality will empower municipal employees "take ownership" for the system/s they work with as well as to improve the competency of employees.

Establishment of an ICT Management Committee – This committee enables representation at Council level to enable adequate ICT direction.

Adhere to Standard Operating Procedures (SOP's) – The Municipality adheres to SOP's to ensure adequate ICT Governance.

Improved Local Government initiatives – Improved interaction with Local Government initiatives will enhance "on the ground" service delivery to communities.

Enhanced responsibility & ownership for actions – employee empowerment to take ownership for their actions resulting in improved decision making as well as enhanced trust.

Service delivery starts with the "small issues being corrected" – Enhancing & improving the communities' adverse municipal perception re service delivery by delivering & correcting the "small issues" timeously.

Enhanced ethos & work ethic of personnel - establish a code of conduct that builds public trust and confidence in the municipality. Reduce uncertainty as to what is ethical and unethical behaviour. Establish public service as a profession to be proud of.

Improvement in the use of SAGE ERP – An improvement in the users involvement in the various SAGE ERP modules would enhance information sharing & cooperation both within &between departments. An example is the Municipal Budget which is currently produced &managed external to the SAGE ERP Budget module.

4.5.6. Business Continuity and Security Architecture

Authentication, Access Control, Policies, MISS etc.

5. IT Strategy Plan

This IT STRATEGY PLAN describes how each service can be enhance by the Fetakgomo local municipality with real products or standards. While it is generally premature to provide specific product configurations and capacities at this stage, it is possible to describe which services, products and standards would best satisfy the architecture models while being consistent with the municipalities' capabilities.

All the identified initiatives will be prioritised based on strategic importance and value. The phase will be concluded with the development of an implementation plan, based on operational priorities and budget constraints.

5.1. Public Services

5.1.1. Strategic Management

Decide on role of outlying offices – The Thusong service centre in Atok and Mohlaletse, and the community hall at Staykraal, Pelangwe, Seokodibeng and Mphanama as well as Fetakgomo library should either be converted into a full service point by deploying a full ICT infrastructure to them, .

Clarify key development and service delivery priorities – based on the IDP process, "It is essential to spend the limited council (municipal) resources on the key development priorities of the local community".

Clarify roles/relationship between council and municipality – The municipality should be autonomous, however they are inter-dependant on the council functions. whole system collaboration - Hold regular formal/informal meetings between council and officials, and amongst departments, and with outlying offices.

Improve availability of Council and Management minutes - Make council and management minutes available to all staff on a document management system

Improve interaction with communities – use the ICT infrastructure such as document management system, e-mail, internet, libraries, and info centre to improve the availability of relevant information to the communities.

5.1.2. E-Governance

E-Governance defines how the municipality does ICT planning and management in the municipality. The following section outlines these ICT management and planning initiatives identified as part of the e-governance recommendations.

ICT Management

Establish ICT Steering committee – ICT management requires dedicated attention in the municipality. Lack of budget and dedicated staff indicate a joint responsibility amongst senior managers and system owners. The MM will represent the ICT Steercom at EMC. The manager IT & Archives will act as the secretariat, coordinating meetings, minutes, and contact person for all initiatives.

Define governance for ICT Steercom – all ICT budgeting and initiatives should be determined and approved by the ICT Steercom.

Develop ICT management capabilities – all members of the ICT Steercom should attend some training in Information Systems, and ICT management include as part of their performance agreement.

Establish AUP - the ICT steering committee should champion the implementation of a acceptable use policy (Internet and e-mail policy) for computers, email, and internet use at Fetakgomo Local Municipality. This policy should be no longer than two pages, and should encompass whether ICT's are for that all messages may be stored or recorded in an archiving system.

Subscribe to IT & Government periodicals – in order to stay current with ICT developments in Government, the municipality should subscribe to periodical such as electronic Government, IT Web's iWeek and other relevant publications.

Include the IT STRATEGY PLAN as part of the IDP Process – The IT STRATEGY PLAN initiatives should form part of the IDP, and the planning process should be included.

Align with LG-Net initiative – A considerable investment has been made in the LG-Net initiative, both in the provision of infrastructure, and content. The municipality should consider how it can benefit from these investments, and use it to improve service delivery.

IT STRATEGY PLAN Initiatives funding to come from CAPEX or special project funding – Funding for IT STRATEGY PLAN initiatives, are over-and-above the capital required for the normal operation of the municipality. Funding should be provided by budgeting for capital expenditure items, and by applying for donor grants.

Review IT support model – Fetakgomo Local Municipality should review its outsourcing model for IT support to ensure the required level of services. The ICT outsource contract should not be expected to do strategic ICT and capacity planning. This function should be performed by the ICT Steercom.

ICT Planning and prioritisation

Priorities IT STRATEGY PLAN initiatives - The ICT Steercom needs to prioritise these IT STRATEGY PLAN initiatives, based on available funding and capability to source funding and vendors. These initiatives can be prioritised according to the scoring framework provided.

Develop ICT planning capabilities – the ICT Steercom members need to develop ICT planning capabilities, in order to cater for support for future IDP initiatives.

ICT Procurement

Develop a transparent ICT procurement process – To prevent ICT's from being implemented without due consideration for the organisational and functional needs, a transparent process should be implemented based on detailed system requirements.

5.1.3. E-Government Services

E-Government services are effectively normal services provided through e-channels such as internet/email, telephones, and computers. Following are the key e-Government services that Fetakgomo Local Municipality should implement as part of their IT STRATEGY PLAN.

Improved Financial Management

Train all managers in budgeting and financial basics – in order to improve the adoption of the financial system in the municipality, all managers should do their departments' budget, and financial analysis on SAGE ERP. This may require additional training.

Deploy all SAGE ERP modules - The other modules of the financial system, such as HR, Asset register, procurement, etc. should be made available to all managers to do their own administration.

Implement IDP System

Implement IDP Information Management System - The municipality is required to establish and manage an internal IDP system. The system should be capable of planning, prioritising, and tracking progress on IDP initiatives. This should be linked to budgeting and project management systems in order to evaluate progress and performance management.

Align with District Performance Management System – Rather than implementing a separate performance management system, the municipality should evaluate adopting the district performance management system.

Effective Communication

Implement and roll out access to document management system (DMS) to everyone in the municipality – Information from DMS should be made available in paper format, or by providing shared PC's for staff that do not have their own. Minutes, Bylaws, and public notices should be reproduced free of charge from DMS, and made available to the public.

Compliances with ECT act – All electronic communication in-and-out the municipality should be archived in its original form, just like paper records. In order to aid this, a tool such as Exchange Archiving solution is recommended.

Services to the citizen

Deploy services to remote areas by using ICT's – ICT's such as Citrix, DMS, should be deployed to outlying service offices in order to provide the staff at these offices with the tools to answer all types of queries, not just financial ones or traffic related matters.

Contact CentRE

Implement a central Information contact centre - Implement a central contact centre integrated with DMS for emergency services and service requests/complaints. This should allow for all public calls, information, service request, enquiries, emergencies etc. to be logged and handled. This does not mean that calls are just logged and forwarded. Agents should be able to answer all reasonable municipal queries as a first line contact centre. More complicated requests should be forwarded to the relevant people. All requests should be logged, and allocated in DMS.

Tourism Development

Collaborate with information bureaux – The municipality can effectively use the information centres as a source of information on tourists, and requests. A more formal mechanism should be put in place to facilitate this.

Library services

Establish electronic resources for libraries - Libraries are a key resource for community development. The municipality should collaborate with Provincial library services to provide PC's, internet access, and support to the libraries in the municipality. Citrix can be used to deliver internet to outlying areas, and ADSL for internet bandwidth. The municipality should also partner with a local provider to do training and provide value added services such as CV/Letter writing workshops etc.

5.2. Platform Services

The following section defines the platform services on which the provisioning of e-government services are dependant.

5.2.1. Application Platform (Software)

1) **Ensure continued support for SAGE ERP** – In the short term the municipality should consider reviewing all modules provided by the ERP and implement them where requirements of the municipality are at least 80% fulfilled. The hardware and OS should be upgraded to a more suitable environment to cater for the municipalities needs.
2) **Provide access to LG-Net** - All management and strategic staff should be given access to the facility and a policy document implemented on the usage of the system. This will ensure the sharing of information, not having to re-invent the wheel in many instances and also staying current with management practices and initiatives within other municipalities.
3) **GIS Systems** - Consider acquisition of The GIS system and should be standardised on one software platform, to incorporate all the requirements of the municipality. A needs assessment should be performed, and the most suitable software selected, and implemented.
4) **Upgrade Mail Server application** - The mail application (Microsoft Exchange) should be upgraded to the latest version to ensure continued vendor support, improved reliability, and easier management and backups.
5) **Implement Exchange Archiving Solution** – EAS allows efficient, searchable archiving of email messages for Microsoft Exchange that assist with the retention, management and control of public information. It further reduces storage requirements by providing single instance storage, and mailbox compression. It also allows recovery of deleted emails.
6) **Upgrade Symantec Backup Exec** – the current version of backup exec should be upgraded to the Back up and live systems should run on the same platform.
7) **Test and re-condition uninterruptible power supply** - the batteries of the current UPS should be tested, and replaced/reconditioned if necessary. The server room and pay points should be able to operate on UPS for more than 4 hours during a power failure.

5.2.2. Service Platform

Implement Citrix terminal server for resource intensive applications – all resource intensive applications such as Geo-Reality, and for remote stations, DMS & internet should be deployed via Citrix.

5.2.3. Desktop Platform

Develop and implement desktop & Server standards – The desktop computers have a mixture of Windows XP and Windows 7 and one standard should be considered and upgraded across the board. This ensures easier support and updates. Servers should be upgraded to the latest OS.

5.2.4. Operating Systems

Develop and implement OS standards – Operating systems in use should be standardised to Windows 7 & 8, and Windows Server 2008 R3, to simplify management and deployment of new applications.

5.3. Infrastructure Services

The following ICT improvement opportunities have been identified:

5.3.1. Technology Infrastructure

Implement rack mounted servers – the server infrastructure should be upgraded to rack mounted or blade servers, to reduce cost, cable clutter, fire hazard, manageability, and flexibility.

Consolidate Servers – Once the servers have been upgraded, all applications should be consolidated, and the number of servers reduced. Vendor applications can all be run off the same servers. The municipalities' service provider should be able to remotely manage and configure these servers.

Upgrade or Outsource Server Room Infrastructure - The computer room should ideally adhere to best-practice standards and have amongst others access control, temperature control, raised flooring, static protection etc.

The above services could possibly be hosted on the LG Net initiative.

Network Infrastructure

Wide Area Network (WAN)

Implement ADSL for Internet Access - The current bandwidth for external connectivity is extremely slow and should be upgraded to accommodate email and internet

connectivity and also prepaid updates. An uncapped ADSL solution should be investigated or both of the above proposed solutions.

Metropolitan Area Network (MAN)

Establish PPP with VANS – Fetakgomo Local Municipality should establish a public-private partnership with a value added network service provider (VANS) such as RedLinx for the provisioning of metropolitan area networks between offices, libraries, and outlying areas.

The cost of such a partnership should be carried by the VANS (i.e. at no cost to the municipality), and fees for this should be recovered from the public on a pay-per-use basis.

Local Area Network (LAN)

Upgrade LAN equipment – Local networking equipment in Ceres, Wolseley, and Tulbagh should be upgraded, and standardised on 10/100 mb/s Ethernet switches.

5.4. IT Strategy Plan Initiatives

5.4.1. Public Services

S1	Decide on role of outlying offices	Free	Immediate
S2	Clarify key development and service delivery priorities	Free	Short
S3	Clarify roles/relationship between council and municipality	Free	Short
S4	Improve whole system collaboration	Low	Short
S5	Improve availability of Council and Management minutes	Medium	Medium
S6	Improve interaction with communities	Medium	Long
E1	Establish ICT Steering committee	Low	Short
E2	Define governance for ICT Steercom	Free	Immediate
E3	Develop ICT management capabilities	Medium	Medium
E4	Establish AUP	Free	Medium
E5	Subscribe to IT & Government periodicals	Low	Immediate
E6	Include the IT STRATEGY PLAN as part of the IDP Process	Free	Immediate
E7	Align with LG-Net initiative	Free	Short
E8	IT STRATEGY PLAN Initiatives funding to come from CAPEX or special project funding	Free	Long
E9	Review IT support model	Free	Short
E10	Prioritise IT STRATEGY PLAN initiatives	Free	Immediate
E11	Develop ICT planning capabilities	Medium	Long

E12	Develop a transparent ICT procurement process	Low	Medium
G1	Train all managers in budgeting and financial basics	Low	Medium
G2	Deploy all SAGE ERP modules	Medium	Long
G3	Implement IDP Information Management System	High	Long
G4	Roll out access to DMS to everyone in the municipality	High	Immediate
G5	Compliancy with ECT act	High	Short
G6	Deploy services to remote areas by using ICT's	Astronomical	Medium
G7	Implement a central Information contact centre	Astronomical	Long
G8	Collaborate with information bureaus	Low	Immediate
G9	Establish electronic resources for libraries	High	Immediate

Legend – S = Strategic, E=E-Governance, G = Government Service

5.4.2. Platform Services

P1	Ensure continued support for SAGE ERP ACCPAC	Free	Short
P2	Review pre-paid Water Meter system	Low	Immediate
P3	Roll out DMS to further users	High	Immediate
P4	Review Geo-Reality implementation	Low	Immediate
P5	Provide access to LG-Net	Low	Medium
P6	Consolidate GIS Systems	High	Long
P7	Upgrade Mail Server application	Medium	Immediate
P8	Implement Exchange Archiving Solution	High	Medium
P9	Upgrade Symantec Backup Exec	Low	Immediate
P10	Test and re-condition UPS	High	Short
P11	Implement Citrix terminal server	High	Immediate
P12	Develop and implement desktop & Server standards	Medium	Medium
P13	Develop and implement OS standards	High	Short

5.4.3. Infrastructure Services

I1	Implement rack-mounted servers	High	Immediate
I2	Consolidate servers	Low	Short
I3	Upgrade or Outsource Server Room Infrastructure	High	Short
I4 I	Implement ADSL for Internet Access	Medium	Immediate
I5	Establish PPP with VANS	Low	Medium
I6	Upgrade LAN equipment	Medium	Medium
I7	Register as a PTN (Private Telecommunication Network) Provider	Medium	Short

Legend: Cost Free = only personnel cost, Low <R10,000, Medium between R10,000 & R50,000, and High between R50,000 and R100,000, Astronomical = > R100,000.

Timeframe: Immediate – as soon as possible, short term (coming year or budgetary cycle), medium term(1-3 years), long term > 3-5 years.

5.5. Prioritisation

In the development of the IT Strategy Plan (IT STRATEGY PLAN) the framework below was used for the selection and positioning of the portfolio and initiatives for example:

Initiative Scoring Framework:

Criteria (C)	Weight	Very Good = 10	Good = 8	Average = 6	Poor = 4	Very poor = 2	Rating = W X C
Strategic fit							
Citizen Focus							
Consistent with technical competency							
Value add							
Providing information							
Technical sound							
Compatible with existing projects							

Rating= W X C

Strategic Fit 2 X 12

Citizen Focus 2 X 8

Consistency with

Technical Competence

5.6. Implementation Plan

Although Fetakgomo Local Municipality assumes ownership and remains responsible for the implementation and maintenance of the IT STRATEGY PLAN, the requirement exists

to supplement the current skills and capacity within the municipality with specific services to facilitate the implementation process of the IT STRATEGY PLAN. The necessary skills and capacity to satisfy the following needs should be established as a temporary measure:

Program Management - Monitoring of the execution of projects, which are embarked on in accordance with the requirements of the IT STRATEGIC PLAN.

Architecture Support - The provision of guidance to the municipality in ensuring that all Business Application initiatives, Data Architectures and Technology Architectures are in accordance with the requirements of the IT STRATEGY PLAN.

Maintaining of the IT STRATEGY PLAN - Changes in the Council, IDP, Legislation, Acts, Policies, Objectives and Mandates may require the IT STRATEGY PLAN to be reviewed and updated. Ensuring that all relevant impacts on ICT requirements are taken into account, it is important to facilitate any of these amendments in order to maintain the IT STRATEGY PLAN accordingly. In addition, it is crucial that all impacts to the IT STRATEGY PLAN are continuously being evaluated.

Project Feasibility and Initiation Framework Establishment - The development and introduction of a framework to guide and evaluate all IT STRATEGY PLAN projects for the municipality.

For a typical framework, please refer Appendix A. The purpose of the framework will be to evaluate all new ICT related proposals. This process will include (1) Structure, (2) Review and (3) Reporting System.

Guidance and Support - The provision of guidance and support to Fetakgomo in the following areas:

- In the absence of a CIO or an ICT Steering committee, assist with this vital role in order to ensure the successful rollout of the IT STRATEGY PLAN.
- Assist with the agenda setting for the ICT Steercom
- Provide a developmental role (assisting and coaching) to the ICT Steering committee as appropriate and ensure that the necessary skills are transferred during the period of the Maintenance Agreement

Building Council Support - Council support is a prerequisite for the successful implementation of the IT STRATEGY PLAN. This function should assist in building Council support, by coordinating and facilitating workshops and presentations where appropriate with the Council, in respect of the IT STRATEGY PLAN The successful implementation is highly dependent on the support and buy-in from the all the stakeholders for the IT STRATEGY PLAN. The ICT Steercom should therefore ensure that the relevant support and buy-in has

been obtained / agreed to by all stakeholders, prior to the IT STRATEGY PLAN implementation.

5.7. Benefits

By implementing the IT Strategy Plan, Fetakgomo local municipality should benefit through improved communication, aligning their ICT with the municipality's strategies, and by putting people first.

Communication and collaboration will be improved between the municipality and other agencies, between council and the municipality, amongst council, municipality and citizens, and amongst municipal employees.

The municipal strategies will be aligned with citizens/provincial/ national needs, the information systems will be aligned with strategy, and the strategies aligned with the municipality's capabilities **BUT MORE IMPORTANTLY THE COSTS OF PROVIDING SERVICE WILL BE REDUCED.**
By implementing the recommendations, the municipality affirms its commitment to the Batho Pele principles, thereby putting people first.

Definitions, Acronyms and Abbreviations

ADSL	Asymmetric Digital Subscriber Line
CBO	Community Based Organization
CDW	Community Development Workers
CoGHSTA	Corporate Governance and Traditional Affairs
CRDP	Comprehensive Rural Development Programme
DBSA	Development Bank of Southern Africa
DLGH	Department of Local Government and Housing
DEAT	Department of Environment and Tourism
DORA	Division of Revenue Act
DOE	Department of Energy
DRDLR	Department of Rural Development and Land Reform
ES	Equitable Shares
EIA	Environmental Impact Assessment
EAP	Employee Assistance Programme
EXCO	Executive committee
FBE	Free Basic Electricity

FET	Further Education and Training
FBS	Free Basic Services
FMG	Financial Management Grant
FBW	Free Basic Water
GAMAP	Generally Accepted Municipal Accounting Practice
GIS	Geographic Information Systems
GRAP	Generally Recognized Practice Accounting
IAA	Internal Audit Activity
IDP	Integrated Development Plan
IWMS	Integrated Waste Management System
ICT	Information and Communication Technology
IS	Information Systems
KPA	Key Performance Area
LED	Local Economic Development
LEGDP	Limpopo Employment Growth and Development Plan
LGDS	Limpopo Growth and Development Strategy
LUMS	Land Use Management System
MDG	Millennium Development Goals
MEC	Member of Executive Council
MFMA	Municipal Finance Management Act
MIG	Municipal Infrastructure Grant
MIOS	Minimum Interoperability Standards
FTM	Fetakgomo Local Municipality
MSIG	Municipal Systems Improvement Grant
MTEF	Medium Term Expenditure Framework
MTAS	Municipal Turn Around Strategy
MPCC	Multi Purpose Community Centre
MPRA	Municipal Property Rates Act
NGO	Non Government Organization
NSDP	National Spatial Development Perspective
SDBIP	Service Delivery and Budget Implementation Plan
SDF	Spatial Development Framework
SAFA	South African Football Association
SASSA	South African Social Security Agency
STATS SA	Statistics South Africa
SCM	Supply Chain Management
SALGA	South African Local Government Association
SMME	Small, Medium and Micro Enterprise
OHS	Occupational Health and Safety
RAL	Road Agency Limpopo

RDP	Reconstruction and Development Program
PHP	People Housing Process
PMS	Performance Management System
SA	South Africa
XML	eXtensible Markup Language

C72/2014
Council Resolution No.

30/06/2014
Date

Mamphekgo K.K
The Speaker

30/06/2014
Date